CLAIMS

What is claimed is:

- 1. A method of treating a poxvirus infection, the method comprising administering to an individual an effective amount of IFN-α.
- 2. The method of claim 1, wherein the IFN- α is administered concurrently with a vaccinia virus vaccine.
- 3. The method of claim 1, wherein the individual has been vaccinated with vaccinia virus.
- 4. The method of claim 3, wherein the IFN- α is administered from 1 to 30 days after vaccination.
- 5. The method of claim 1, wherein IFN- α is administered from 1 day to 1 year before administration of a vaccinia virus vaccine.
- 6. The method of claim 1, further comprising administering a vaccinia virus vaccine.
- 7. The method of claim 1, wherein the individual has been exposed to smallpox virus, and the IFN-α is administered within 24 hours of exposure to smallpox virus.
- 8. The method of claim 1, wherein the individual has been exposed to smallpox virus, and the IFN- α is administered within 48 hours of exposure to smallpox virus.
- 9. The method of claim 1, wherein the individual has been exposed to smallpox virus, and the IFN-α is administered 72 hours to 35 days after exposure to smallpox virus.
- 10. A method of treating a poxvirus infection, the method comprising administering to an individual an effective amount of IFN-γ.

WO 2004/093901 PCT/US2004/007509

11. The method of claim 10, wherein the IFN- γ is administered concurrently with a vaccinia virus vaccine.

- 12. The method of claim 10, wherein the individual has been vaccinated with vaccinia virus.
- 13. The method of claim 12, wherein the IFN- γ is administered from 1 to 30 days after vaccination.
- 14. The method of claim 10, wherein IFN-γ is administered from 1 day to 1 year before administration of a vaccinia virus vaccine.
- 15. The method of claim 10, further comprising administering a vaccinia virus vaccine.
- 16. The method of claim 10, wherein the individual has been exposed to smallpox virus, and the IFN- γ is administered within 24 hours of exposure to smallpox virus.
- 17. The method of claim 10, wherein the individual has been exposed to smallpox virus, and the IFN- γ is administered within 48 hours of exposure to smallpox virus.
- 18. The method of claim 10, wherein the individual has been exposed to smallpox virus, and the IFN- γ is administered 72 hours to 35 days after exposure to smallpox virus.
- 19. A method of treating a poxvirus infection, the method comprising administering to an individual effective amounts of IFN- γ and IFN- α .
- 20. The method of claim 19, wherein the IFN-γ and IFN-α are administered concurrently with a vaccinia virus vaccine.
- 21. The method of claim 19, wherein the individual has been vaccinated with vaccinia virus.

WO 2004/093901 PCT/US2004/007509

22. The method of claim 21, wherein the IFN- γ and IFN- α are administered from 1 to 30 days after vaccination.

- 23. The method of claim 19, wherein the IFN-γ and IFN-α are administered from 1 day to 1 year before administration of a vaccinia virus vaccine.
- 24. The method of claim 19, further comprising administering a vaccinia virus vaccine.
- 25. The method of claim 19, wherein the individual has been exposed to smallpox virus, and the IFN- γ and IFN- α are administered within 24 hours of exposure to smallpox virus.
- 26. The method of claim 19, wherein the individual has been exposed to smallpox virus, and the IFN- γ and IFN- α are administered within 48 hours of exposure to smallpox virus.
- 27. The method of claim 19, wherein the individual has been exposed to smallpox virus, and the IFN- γ and IFN- α are administered 72 hours to 35 days after exposure to smallpox virus.
- 28. The method of any one of claims 1, 10, and 19, further comprising administering an effective amount of a nucleotide analog or a nucleoside analog.
- 29. The method of any one of claims 1-9, wherein the IFN- α is a consensus interferon.
- 30. The method of any one of claims 19-27, wherein the IFN- α is a consensus interferon.